2016 Third Quarter Mining Report

Facility Name: Poly Met Mining, Inc. (PolyMet) NorthMet Mining Project

Current Actions: 1) NPDES/SDS permit (Draft NPDES/SDS Permit No. MN0071013)

2) Part 70 air emission permit (Draft Permit No. 13700345-001)

3) 401 Certification (Draft Certification No. 1999-5528-JKA)

4) 401 Certification discussions in parallel with 404 permit preparation

Project Supervisor Ann Foss, Richard Clark, Suzanne Baumann, Jeff Stollenwerk

Project Manager: Jim Robin (WQ), Steve Sommer (AQ)

Lead Staff: Hassan Bouchareb (AQ), Stephanie Handeland (WQ), Jen Oknich (401

Certification)

Lead Agencies: MPCA

Accomplishments during this reporting period:

- Air Quality:
 - Received a Class I air dispersion modelling protocol on June 17, 2016 and approved the final version on July 19, 2016.
 - Received Class II air dispersion modelling protocols for the mine site on April 15, 2016 and plant site on April 28, 2016, and approved the final versions of both protocols on August 3, 2016.
 - Received Air Emissions Risk Analysis (AERA) modelling protocols for the mine site on June
 17, 2016 and plant site on June 10, 2016, and approved the final versions of both protocols on July 7, 2016.
 - Received an air permit application on August 24, 2016.
 - Sent an application completeness review letter on September 1, 2016, which indicated that the air permit application is complete enough for processing.
- MPCA received an NPDES/SDS water quality permit application from PolyMet on July 11, 2016.
 - MPCA deemed the application 'complete for processing' on August 2, 2016. (MPCA may request additional information from PolyMet during development of the draft permit to clarify information contained in the application.)
- MPCA received a 401 Certification application from PolyMet on August 2, 2016.
 - Held conference call with representatives from PolyMet, MPCA, USACE and USEPA on August 18, 2016 to provide an overview of the 401 Certification application.

Plans for the next reporting period:

- MPCA will continue to review the permitting and certification applications.
- MPCA will continue to coordinate with other permitting agencies as the applications and certification applications are reviewed.
- MPCA will continue to update the agency's project web site with permit-related information that may be of interest to the general public.
- MPCA staff will remain in communication with the EIS Co-lead Agencies as the federal Records of Decisions on the FEIS are considered.

Facility Name: US Steel (USS) - Minntac

Current actions: 1) Water quality permit reissuance (NPDES/SDS Permit No. MN0057207) for the

tailings basin

2) Multi-media Schedule of Compliance (SOC)

Project Supervisor: Suzanne Baumann

Project Manager: Steve Sommer

Lead Staff: Erik Smith (WQ), John Thomas (WQ)

Lead Agency: MPCA

Accomplishments during this reporting period:

• On September 30, MPCA received a Line 5 Low NOx main burner report.

Plans for the next reporting period:

• Ongoing implementation of the groundwater Sulfate Reduction Plan at monitoring well MW012.

Facility Name: US Steel - Keetac

Current actions: Water quality permit compliance schedule (NPDES/SDS Permit No. MN0031879)

Project Supervisor: Suzanne Baumann

Project Manager: Steve Sommer

Lead Staff: Brandon Smith (WQ), John Thomas (WQ)

Lead Agency: MPCA

Accomplishments during this reporting period:

• On August 19, 2016, MPCA received a six-month update of activities associated with Keetac's Sulfate Reduction Plan.

Plans for the next reporting period:

• Keetac will initiate implementation of the final Pilot Test Work Plan.

Facility Name: Cliffs Erie LLC – Hoyt Lakes Mining Area and Tailings Basin Area

Current actions: Reissuance of combined water quality permits (NPDES/SDS Permit Nos.

MN0042536 and MN0054089)

Project Supervisor: Ann Foss
Project Manager: Jim Robin

Lead Staff: Richard Clark, Stephanie Handeland

Lead Agency: MPCA

Accomplishments during this reporting period:

 Continued discussions with the company to acquire necessary information for permitting and to assure continued progress on Consent Decree requirements.

• In July and August, Cliffs Erie submitted draft updated Long Term Mitigation and Implementation Plans for SD030, SD012 and the Dunka mining area.

Plans for the next reporting period:

- Continue internal discussion with the goal of refining the permitting approach and continuing progress on the schedules for the various mining areas/discharges.
- Continue technical review of the updated long term mitigation plans with follow-up discussions with Cliffs Erie as needed.

Facility Name: Northshore Mining Company

Current actions: 1) Water quality permit reissuance for Silver Bay Plant and Mile Post 7 (MP7)

Tailings Basin (NPDES/SDS Permit No. MN0055301)

2) Air permit major amendment application from Northshore to change how

fibers are regulated (Draft Air Emission Permit No. 07500003-011)

Project Supervisor: Jeff Udd (WQ)

Suzanne Baumann (AQ)

Project Manager: None

Lead Staff: Brandon Smith (WQ reissuance of plant site permit)

Lead Agency: MPCA for AQ and WQ Permits

Accomplishments during this reporting period:

 On August 16, MPCA staff presented information to the MPCA Advisory Committee seeking feedback to inform whether we should proceed with our proposal to change how fibers are regulated at Northshore. The Advisory Committee memo can be found here: https://www.pca.state.mn.us/sites/default/files/p-ac16-08b.pdf

On August 18, MPCA staff shared with the Bands and Northshore more detail about the proposal
and sought feedback to inform whether we should proceed with our proposal to change how fibers
are regulated at Northshore.

Plans for the next reporting period:

- Staff are evaluating pre-public notice feedback on the NPDES/SDS permit.
- Staff are evaluating feedback on the fiber proposal. Any change to how fibers are regulated at
 Northshore would require a major amendment to its air permit; which includes a period for tribal
 and company review prior to a public notice period.

Facility Name: United Taconite LLC - Fairlane Plant

Current actions: Air permit moderate amendment to produce higher flux-content taconite

pellets (including installing low NO_X burners on both induration lines) (Draft

Permit No. 13700113-007)

Project Supervisor: Suzanne Baumann

Project Manager: Steve Sommer

Lead Staff: Hassan Bouchareb

Lead Agency: MPCA

Accomplishments during this reporting period:

MPCA provided the draft permit to the company and the Bands. Feedback was received from United
 Taconite and Fond du Lac.

• Staff began evaluating the feedback received.

Plans for the next reporting period:

 Continue drafting the moderate permit amendment and anticipate sending it to EPA for their review. Because it is a moderate permit amendment, there is no formal public notice period for this permit. Facility Name: Hibbing Taconite Company

Current actions: Water quality reissuance of tailings basin NPDES/SDS permit No. MN0049760

Project Supervisor: Richard Clark

Project Manager: None

Lead Staff: TBD (WQ)

Lead Agency: MPCA

Accomplishments during this reporting period:

• No MPCA activity during this reporting period.

Plans for the next reporting period:

• Continue work on combined Mine Area and Tailings Basin water quality permit as staffing and priorities allow.

Facility Name: Magnetation Plant 1

Current Actions: 1) Water quality permit reissuance (SDS Permit No. MN0069221)

2) Air quality initial permit issuance (Draft Permit No. 06100076-001)

Project Supervisor: Suzanne Baumann

Project Manager: None

Lead Staff: Erik Smith (WQ), Ben Wenkel (AQ)

Lead Agency: MPCA

Accomplishments during this reporting period:

No MPCA activity during this reporting period.

Plans for next reporting period:

• None at this time.

Facility Name: Mining Resources, LLC

Current Actions: 1) Air quality initial permit issuance (Draft Permit No. 13700341-001)

2) Water quality permit reissuance (SDS Permit No. MN0070050)

Project Supervisor: Suzanne Baumann

Project Manager: None

Lead Staff: Sarah Seelen (AQ), Stephanie Handeland (WQ)

Lead Agency: MPCA

Accomplishments during this reporting period:

• No activity during this reporting period.

Plans for next reporting period:

- The MPCA will continue working on a draft air quality permit, as time allows.
- Begin work on draft water quality permit.

Facility Name: Twin Metals

Current actions: Support DNR on an Environmental Assessment Worksheet for a proposed bulk

sample

Project Supervisor: Suzanne Baumann

Project Manager: Ann Foss
Lead Staff: Vacant
Lead Agency: DNR

Accomplishments during this reporting period:

• No MPCA activity during this reporting period.

Plans for the next reporting period:

• Continue to assist DNR as needed.

MAJOR PERMIT APPLICATIONS RECEIVED THIS QUARTER

- MPCA received an NPDES/SDS water quality permit application from PolyMet on July 11, 2016.
- MPCA received a 401 Certification application from PolyMet on August 2, 2016.
- MPCA received a Part 70 air emission permit application from PolyMet on August 24, 2016.

COMPLETED MINING PROJECTS

Project Name: Mag Mining LLC Plant 4 – Initial Air Quality Permit Issuance

Completed: Part 70 major air quality permit was issued March 15, 2016 (Permit No.

06100079-001)

Lead Staff: Sarah Seelen

Project Name: Magnetation Plant 2 Water Permit

Completed: Water quality permit reissued on October 10, 2015

Project Coordinator: Suzanne Baumann

Lead Staff: Erik Smith, Ben Underhill

Project Name: US Steel – Keetac – Water Quality Permit Modification

Completed: Water quality permit modification to modify turbidity limits (NPDES/SDS Permit

No. MN0031879) was issued on September 4, 2015, with an effective date of

October 1, 2015

Lead Staff: Brandon Smith

Project Name: Magnetation Plant 2 – Initial Air Quality Permit Issuance

Completed: Part 70 major air quality permit was issued August 18, 2015 (Permit No.

06100078-001)

Lead Staff: Hassan Bouchareb

Project Name: United Taconite – Wet to Dry Particulate Control Change and Modify Scrubber

Solids Wasting Requirements

Completed: Major air permit amendment to replace 22 wet scrubbers with baghouses that

control particulate emissions from material handling operations and modify the scrubber solids wasting requirements. Issued on May 19, 2015 (Permit No.

13700113-006).

Lead Staff: Owen Seltz

Project Name: Hibbing Taconite Company – Wet to Dry Particulate Control Change and

Modify Scrubber Solids Wasting Requirements

Completed: Air permit major modification (Permit No. 1370006-007) to update GP 019: In-

Pit Crushing and Cobbing (IPCC) for increased flexibility. Issued on June 1, 2015.

Lead Staff: Sarah Seelen

Project Name: Northshore Mining Company – Material Handling Equipment Project

Completed: Moderate air permit amendment to install additional material handling

equipment in the finished pellet yard was issued on February 5, 2015 (Permit

No. 07500003-010).

Lead Staff: Cindy Schafer

Project Name: Northshore Mining Company – Low NOx Burner Project

Completed: Major air permit amendment was issued on January 26, 2015 for the installation

of low NOx burners (Permit No. 07500003-009).

Lead Staff: Hassan Bouchareb
